II. REMARKS

Claims 19 through 39 stand rejected. Claims 19, 29, 35, 38, and 39 are being amended. Specifically, claims 19, 29, and 35 are each directed to a method of collecting first image data corresponding to a first parameter set and then stopping the collecting of the first image data for a dynamically adjustable delay period. Claims 19 and 35 further require collecting, after the delay period, second image data corresponding to a second parameter set. Alternatively, claim 29 requires sequentially indexing the imaging device to each parameter in a plurality of parameter sets, collecting further Image data for each parameter set, and stopping the collecting for each further image data for a respective dynamically adjustable delay period.

Stopping for a dynamically adjustable delay period before the collection of subsequent image data offers certain benefits and advantages. For example, the delay period can be adjusted to corresponding to the time it takes for a patient to exhale and inhale and again hold his or her breath between taking raw image data for different orientations, such as a horizontal view versus a previous vertical view, while the patient remains at the same location, and then processing the raw image data into final images. Alternatively, the delay period can be dynamically adjusted such that image data for a different orientation can be taken immediately after taking image data for a previous orientation while the patient holds a single breath and remains at the same location, such that the patient needs to hold his or her breath only once while image data for multiples views are taken.

After entering this amendment, claims 19 through 39 remain pending.

Reconsideration of this application in view of the above amendments and the following remarks are respectfully requested.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 19, 20, 22-25, 29-31, and 35-39 have been rejected under 35 U.S.C. § 103(a) as being obvious over Applicants' admission of the prior art. Claims 19, 20, 22-25, 29-31, and 35-39 have also been rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,657,757 to Hurd et al. ("Hurd"). Claims 26-28 and 32-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Hurd in view of U.S. Patent No. 5,363,844 to Riederer et al. ("Riederer"). Claim 21 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' own admission or Hurd alone and further in view of U.S. Patent No. 4,875,485 to Matsutani ("Matsutani"). After careful consideration of these rejections, Applicants traverse.

The Examiner concedes that the prior art does not disclose stopping the collection of image data for a delay period, but contends that such stopping is obvious. None of the references, however, teaches or suggests stopping the collection of image data, dynamically adjusting a delay period, and then collecting additional image data after the delay period, as recited in amended claims 19, 29, and 35.

Specifically, Hurd's method merely loads a pulse sequence parameter, executes a pulse sequence, separately processes and stores the acquired image

data, and loops back to repeat the steps for a next pulse sequence parameter. This loop is repeated until each pulse sequence is executed with its particular set of stored parameters. The system then waits for a selected time period after the collection of all the image data to determine if the scan is complete. That is, Hurd's system does not stop for a dynamically adjustable delay period between the loops. Applicant's method on the other hand stops the collection of image data between each sequence to allow the patient to breathe if desired. Indeed, Hurd falls to appreciate the advantages mentioned previously of an imaging procedure that incorporates dynamically adjustable delay periods between the sequences or loops.

Hence, Hurd neither teaches nor suggests, but rather teaches away from an imaging procedure that stops the collection of first Image data for a dynamically adjustable delay period, and then resumes the collection of second image data, as required by amended claims 19, 29, and 35.

Accordingly, reconsideration of the rejections under 35 U.S.C. § 103(a) and allowance of claims 19, 29, and 35 are respectfully requested.

Because the prior art, in particular, Riederer nor Matsutani, does not overcome the deficiencies of Hurd, and because claims 21, 26-28, and 32-34 depend from amended claims 19, 29, or 35, the reasons for allowance of claims 19, 29, and 35 apply as well to the dependent claims.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the pending claims (Claims 19 through 39) are now in condition for allowance. If the Examiner believes that personal contact would be advantageous to the disposition of this case, please contact the undersigned Attorney at the earliest convenience of the Examiner.

Respectfully submitted by,

Dated: 5/27/04

Rég. No.: 48,423 Attorney for Applicants

BRINKS HOFER GILSON & LIONE P.O. Box 10395 Chicago, IL 60610 (734) 302-6000